

ABSTRACT

A CMOS pixel amplifier circuit includes four transistors having the same polarity, and a photodetector. An access supply connects to the pixel circuit via a bus and is configured as a current source that acts as a distributed feedback amplifier, when it is connected to the pixel transistors. The access supply connects to an access MOSFET that isolates a common
5 node from an output node. In this configuration, the feedback amplifier is a cascoded inverter, which provides gains 100 - 1000 times greater than prior circuits.